

ABSTRACT

Band control for every flow is made, and at the same time priority control is realized by a simple hardware configuration. A flow identification section 1 identifies the flow, to which each packet belongs. Flow identification information is notified to a flow setting information storage section 2. Based on such information, flow setting information is notified to a polishing section 3. In the polishing section, a rate measurement section 31 measures an arrival rate of the packet, and based on this arrival rate, a rate calculation section 32 calculates an arrival rate for the flow, to which the packet belongs. Then, a band comparative determination section 33 compares this arrival rate for the flow to information such as the minimum guaranteed band and the upper limit band previously set for this flow, and performs class setting for the flow for every packet. Flow identification information for each flow is stored in a schedule storage section 42 by class. A flow selection section 43 and a packet output section 44 selectively outputs the flow belonging to the high priority class.